Syllabus.

vegetable carbons could not be sustained because charcoal had been used before in incandescent lighting. There is undoubtedly a good deal of testimony tending to show that, for the past fifty or sixty years, the word "charcoal" has been used in the art, not only to designate carbonized wood, but mineral or hard carbons, such as were commonly employed for the carbon pencils of arc lamps. But we think it quite evident that, in the patents and experiments above referred to, it was used in its ordinary sense of charcoal obtained from wood. The very fact of the use of such word to designate mineral carbons indicates that such carbons were believed to possess peculiar properties required for illumination, which before that had been supposed to belong to wood charcoal.

We have not found it necessary in this connection to consider the amendments that were made to the original specification, upon which so much stress was laid in the opinion of the court below, since we are all agreed that the claims of this patent, with the exception of the third, are too indefinite to be the subject of a valid monopoly.

As these suggestions are of themselves sufficient to dispose of the case adversely to the complainant, a consideration of the question of priority of invention, or rather of the extent and results of the Sawyer and Man experiments, which was so fully argued upon both sides, and passed upon by the court below, becomes unnecessary.

For the reasons above stated the decree of the Circuit Court is

Affirmed.

RICHARDS v. CHASE ELEVATOR COMPANY.

PETITION FOR A REHEARING.

No. 819 of October term, 1894. Received June 3, 1895 - Denied November 11, 1895.

The court, on application to file a petition for rehearing, adheres to its opinion, reported in 158 U. S. 299, that letters patent No. 308,095, issued November 18, 1884, to Edward S. Richards for a grain transferring ap-

paratus, are wholly void upon their face, for want of patentable novelty and invention.

While the omission of an element in a combination may constitute invention if the result of the new combination be the same as before; yet, if the omission of an element is attended by a corresponding omission of the function performed by that element, there is no invention if the elements retained perform the same function as before.

When the result of a combination of old elements is a mere aggregation of the several functions of the different elements of the combination, each performing its old function in the old way, there is nothing upon which

a claim to invention can be based.

This was an application for leave to file a petition for the rehearing of a case decided at October term, 1894, and reported in 158 U. S. 299, and of two other cases, argued with that case and decided in accordance with the decision in it. The petition was as follows:

"And now comes the above named complainant, appellant, and respectfully petitions this honorable court to grant a rehearing in the three several above entitled causes, and for cause therefor says:

"I. It seems to us entirely evident from a reading of the opinion of Mr. Justice Brown in this case, that such opinion was arrived at by two mistaken and erroneous conclusions as to questions of fact in regard to the Richards patent in question, and its relation to the grain elevators of this country. It is assumed in the first place, that the judicial knowledge which this court has of the construction and operation of grain elevators, is such that the court can see no patentable distinction or difference between a grain elevator and the grain transferring and weighing devices of the Richards patent. Buildings denominated elevators in this country for the storage of grain are a distinct classification to themselves. Such buildings are called interchangeably elevators, warehouses and stores, but the entire object and purpose of these elevators, stores and warehouses is to afford the opportunity of housing and storing vast quantities of grain at desired points.

"In the Eastern States these buildings are called 'stores,' in the Middle States, 'warehouses,' and in the principal cities of the Western States, 'elevators.' But their common object

and purpose is the same, namely, the housing and storage of grain in great quantities for indefinite periods of time.

"Now, the object of Mr. Richards' invention is to entirely obviate and do away with elevators, and the adoption of the invention of Mr. Richards' patent would mean the conversion of every elevator in this country to other and different com-There can be no better practical illustramercial purposes. tion of the truth of this statement, than to call the attention of this court to the fact, which we think the court will take judicial notice of from simply travelling upon the lines of two of the principal railroad defendants in these cases, in late years, namely, the Michigan Central Railroad Company and the Chicago Grand Trunk Railroad Company. Both of these roads have 'elevators' of all sizes and capacities in connection with and along the lines of their main track and branches. 'Elevators' on the banks of lakes, 'elevators' on the banks of rivers, 'elevators' on the banks of canals, yet neither of these defendant roads will or can use such elevators 'for transferring' and weighing grains without mixing the different lots or loads with each other, thus preserving the identity of each lot while it is being transferred from one car to another.' And both of these defendants will let their 'elevators' lie idle and vacant and will build alongside of them the cheap and simple device of Richards' patent, for transferring their grain from one car to another without storage and without mixing, etc.

"This court says: 'We do not feel compelled to shut our eyes to a fact so well known as that elevators have, for many years, been used for transferring grain from railway cars to vessels lying alongside, and that this method involves the use of a railway track, entering a fixed or stationary building; an elevator apparatus; elevator hopper scales for weighing the grain; and a discharge spout for discharging the grain into the vessel.'

"While it may be true that in some part of an 'elevator' building all of the above may be found with no suggestion or capacity of utilization, as described by Richards, we most earnestly contend that the court should not also shut its eyes to the fact that no elevator ever constructed in this country

was ever used or adapted or could be used or adapted for continuous and automatic transfer of grain from one car to another, weighing the grain in transitu and preserving the identity of each lot of grain in such transfer.

"There is not the slightest capacity in the grain transferring and weighing devices of Richards for any housing or storage capacity. That element has been entirely eradicated by the employment of the Richards devices and intentionally so. We believe that this whole confusion of the Richards invention at stake with elevators, arises from the fact of the illustrative drawings which Mr. Richards' solicitor saw fit to employ in setting forth Mr. Richards' invention.

"Figure 1 of said drawings furnishes grounds of suggestion of the 'elevator characteristic,' but it will be readily seen, even by reference to figure 1, that such drawing simply discloses a covered framework for weather protection in the employment of the transferring apparatus of Richards from one car to an-There is no possible opportunity of storage or warehouse purposes present in such drawings, as the hopper H is merely a unit part of the hopper scales and serves its only purpose in retaining the grain on the scales until the desired weight is registered. This whole question of 'elevator identity' was raised in the Patent Office, and that office, upon an investigation of the facts, at once recognized the distinction between every and all classes of elevators in this country and the Richards invention, and passed the patent to grant, and all we ask in this case, is that this great court will not itself decide these mechanical questions and the question of mechanical effects, upon a recollection of devices, wherein there is opportunity for mistake and an equal opportunity of making certain disputed questions by testimony in relation to which there can be no mistake.

"Take, for example, where this court finds that in the elevators' of this country there can be found hopper scales for weighing grain.' This court certainly cannot take judicial notice of the fact, for such fact never exists, that grain is taken from one car and delivered directly to these hopper scales for any purpose whatever; much less for automatically weighing

the grain by such scales and delivering such grain without deposit in the elevator to a companion car for continuous transferring.

"Take, for example again, the quoted reference of the judicial knowledge of this court as to a discharge spout. court cannot certainly take judicial notice that there has ever existed in any elevator construction a spout connected with hopper scales, wherein grain is weighed by such scales and delivered continuously and instantly therefrom to an awaiting railroad car. To make our position more apparent, supposing Mr. Richards, in the drawings of his patent, had not disclosed the skeleton framework of the building for supporting his transferring and weighing mechanism, but had simply disclosed the means for effecting such transfer, and his claim had read as follows: 'What I claim as new and desire to secure by letters patent is: In combination with two oppositely facing railroad tracks and cars, means for continuously receiving ard elevating the grain of one car into elevated hopper scales, means for automatically weighing and registering such elevated grain by such hopper scales, and means for discharging such elevated grain, so weighed, and registered into said oppositely facing railroad car, continuously by one operation.

"Could there have been any contention that this invention so stated, would be met by any elevator or warehouse in this country, and of which this court could take judicial notice? Yet the above represents the actual invention of Mr. Richards, and we most earnestly contend that the awkward and inartistic description of his invention by such statement of his specification, as associates and connects such invention in the mind of the court with a supposed elevator building, should not stand to the destruction of his patent and invention, without any opportunity given him by a trial and day in court to demonstrate and convince this court of the correctness of his contentions.

"II. The second ground of contention upon which we base this petition for rehearing resides in the statement of Mr. Justice Brown that 'Not a new function or result is sug-

gested by the combination in question.' Most earnestly and emphatically do we take issue with this statement.

"We again state in italics, Mr. Richards' statement of invention as taken from his patent: 'The purpose of my invention is to provide improved means for transferring and weighing grain without mixing the different lots or loads with each other, thus preserving the identity of each lot, while it is being transferred from one car to another.'

"Every function and result of this means and apparatus is new. What was the new function or result suggested by the combination in question? Briefly stated, such new function and result of Richards' combination, was its continuous transfer by the mechanical means described of a carload or lot of grain from one car to another, weighing the grain in its travel, so that when the grain was lodged in a desired car by a continuous operation its identity had been preserved and its weight actually ascertained. No such function or result in any kind of a combination had ever existed in this country, as can be shown, absolutely, by unassailable testimony, if the opportunity is given, and nothing can be more clearly demonstrated if such opportunity is given, that in no 'elevator,' warehouse or store in this country was such function or result known or capable of employment. In every elevator that exists or ever existed in this country, as can be demonstrated, and proven if the opportunity is offered, it is simply impossible to transfer and weigh the grain without mixing the different lots or loads with each other, and it was and is simply impossible to preserve the identity of one lot or load one from the other in any elevator ever constructed, or to continuously transfer one carload of grain to another, weighing the grain as a part of such transfer, and no contention has ever been made that such function or result could be accomplished in any elevator in this country. The Lake Shore and Michigan Southern Railroad Company paid the patentee Richards more than \$100,000 for employing this new function and result, that railroad having elevators galore along the sides of their track at the time they made such payment, and incurred its obligation. Is it too much to ask at the

hands of this court an opportunity to prove the correctness of this statement, that the function and result of this combination is new, especially as the government has so decided and given Richards his grant here in contest therefor?

"We fail to appreciate the relevancy of the suggested parallelism between Mr. Richards' invention of means for transferring and weighing grain 'without mixing different lots;' and the conditions set forth in the opinion of Mr. Justice Brown.

"Take, for example, the statement of the opinion as follows: Suppose, for instance, it were old to run a railroad track into a station or depot for the reception and discharge of passengers, it certainly would not be patentable to locate such stations between two railroad tracks for the reception of passengers on both sides, and to add to the accommodation a ticket office, a newspaper stand, a restaurant, and cigar stand, or the thousand and one things that are found in buildings of that character. It might as well be claimed that the man who first introduced an elevator into a private house, it having been previously used in public buildings, was entitled to a patent for a new combination.' What connection have these conditions to do with Mr. Richards' invention when analyzed and applied?

"A fair illustration of the value of Mr. Richards' inventions using the conditions set forth in the above quotation from the opinion can be illustrated as follows: Supposing Mr. Richards had invented an improved means by which the railroad depots and stations for the reception and housing of passengers could be done away with in this country, and the passengers in the different cars, first and second class, and parlor cars, could be transferred to their respective associate and companion cars upon oppositely facing tracks without delay and harmoniously and continuously by mechanical devices without any effort, danger or responsibility upon the part of the passengers themselves, would not the doing away with the passenger stations and depots of this country and the mechanical transferring of passengers from one car to another be an invention of a high order, the principal element of which would have been the avoidance of expense, and delay attendant to the erection,

support and continuance of the railroad stations and depots of the country? Such conditions would be analogous to the inventions of Mr. Richards, who has done away with the elevators of this country, and the housing of grain therein, and has substituted therefor the mechanical devices of his patent for transferring and weighing grain at terminal points without the necessity, use or employment of elevators.

"III. The third ground of complaint we have against the reasoning and opinion of the court in the disposal of Mr. Richards' patent is the closing sentence of the opinion, namely: 'In fact, the combination claimed is a pure aggregation.' is most difficult to reconcile the above statement with the apparent facts in this case. Having in view, however, the function and result of the combination, namely, the transfer of grain from one car to another, and the weighing of the same in such continuous operation of transfer, keeping each lot and load distinct and separate from the other, wherein can it be contended that any portion of the mechanism or devices utilized to produce this result is in any sense an aggregation. From the track and car where the loaded grain is first taken and acted upon to the track and car where it is taken to and deposited, the operation is continuous and uninterrupted. Every mechanical element entering into the carrying out of and production of this result co-acts either simultaneously or successively with every other element of the combination. Not a single element entering into any one of the mechanical combinations of Richards to transfer and weigh grain, as identified by either claim, can be omitted without destroying the combination and its effectiveness, function and result. How then can it be claimed that a combination of mechanical means and devices, producing a result, co-acting together, wherein no one element of the combination can be omitted without destroying the combination, function and result, is a pure aggregation, we confess we are at a loss to appreciate or understand. Moreover, whether or not an alliance of mechanism is a mere aggregation and juxtaposition of parts is a question which, if disputed, can only be determined by proof, and we most earnestly and confidently contend that if the opportunity

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is offered the patentee Richards to determine this question of aggregation, as represented by his combination, abundant proof can be offered that cannot be contradicted, to the effect that every element of his combination enters into and produces the new function and result identified as his invention, and that all parts co-act together to produce this result, and that such result and function would be impossible if any of the identified parts should be omitted from the combination. For the above reasons briefly stated, we submit that this petition for rehearing should be granted, and Mr. Richards should be given his day in court to demonstrate not only the patentability and validity of his patent grant in question, but also its great value commercially, as an invention, over every and all of the old devices that can be arrayed as an anticipation or comparison therewith."

Mr. Charles K. Offield for the petitioner submitted on the petition.

Mr. Justice Brown delivered the opinion of the court.

A petition was filed at the last term for a rehearing in these cases upon the ground that the court erred in assuming judicial knowledge of the construction and operation of grain elevators, and in holding that these elevators contained practically the same elements as the grain transferring apparatus of the Richards patents. The argument is that the object of Mr. Richards' invention was to obviate and do away with elevators, by securing the continuous and automatic transfer of grain from one car to another, weighing it in transit, and preserving the identity of each lot; whereas, in the ordinary elevator, the grain is raised from the car or vessel, deposited in a storage bin where its identity is lost, and other grain is withdrawn, as required, from the storage bin, to take its place.

That the device described may be a convenient and valuable method of transferring grain from one car to another is not denied. The question is whether it involves invention.

There is certainly no novelty in the result, since the grain may be transferred by shovels from one car to a platform or

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bin, where it may be weighed, and again transferred to a receiving car, though doubtless this is a slow and laborious process. Is there any novelty in the method by which this is done? The grain is shovelled from one car into a chute, from which it passes into the elevator leg, through which the buckets move upward, and is discharged into a hopper. It is there weighed, without being mixed with other grain, a valve is opened, and the grain discharged into the receiving car. There is clearly no novelty in the individual steps of this transfer. Indeed, the failure to claim either one of the elements separately raises a presumption that no one of them is novel.

The novelty, then, must be in the combination, which differs from the combination of an ordinary elevator only in the omission of the storage feature, by which grain is housed in transit, and its identity lost. While the omission of an element in a combination may constitute invention, if the result of the new combination be the same as before; yet if the omission of an element is attended by a corresponding omission of the function performed by that element, there is no invention, if the elements retained performed the same function as before. This is well illustrated in the case of Stow v. Chicago, 3 Bann. & Ard. 92, decided in the same circuit. If, for instance, another person should take out a patent for this same combination, with the weighing hopper omitted, such patent would clearly be void, unless another method of weighing were substituted. The invention in this case is said to consist in the fact that the grain is not stored in transit, but is delivered directly from one car to another. Of course, its identity is not lost, and cannot be lost, since the storage feature, which destroys the identity of the grain in the elevator, is omitted. this is a mere accident and not a new function of the transferring device. The same thing would happen in the case of an elevator, if, while a cargo of wheat were being transferred from a vessel to a train of cars, there happened to be no other grain in store with which the cargo in question could become mixed. In the Richards' device there is never but one lot of grain being transferred at a time, so that there is no possibility of the grain losing its identity, while the ordinary course of

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business in an elevator is for the grain to be dealt with in large cargoes, so that the identity of a particular lot is lost by its being mixed with others. After all, the invention resolves itself into the omission of the storage feature and a necessary incident thereto.

To make a combination of old elements patentable, there must be some new result accomplished, and as the result in this case is a mere aggregation of the several functions of the different elements of the combination, each performing its old function in the old way, we see nothing upon which a claim to invention can be based. The device is undoubtedly a convenient one, and appears to have proven profitable to the patentee; but we are unanimously of opinion that it lacks the necessary quality of invention.

The application is, therefore,

Denied.

ISAACS v. UNITED STATES.

ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF ARKANSAS.

No. 609. Submitted October 23, 1895. - Decided November 11, 1895.

The action of the trial court upon an application for a continuance is purely a matter of discretion, not subject to review by this court, unless it clearly appears that the discretion has been abused.

The court committed no error in charging that the fact that the man killed was a white man might be shown by the statement of the defendant taken in connection with other facts and circumstances.

It is no ground for reversal that the court omitted to give instructions which were not requested by the defendant.

THE plaintiff in error, Webber Isaacs, a Cherokee Indian, was indicted, with two others, for the murder of a white man in the Indian country. There were four counts in the indictment, two charging that the murdered man was Mike P. Cushing, and two that he was an unknown white man. No witness who testified saw the act of killing; but it was shown